

U.S.S.N. 09/373,403

Arathoon et al.

Supplemental Amendment after Final and Interview Summary

REMARKS

Claims 30-36, 38, 40-43, 45, 46-51 and 53-55 are pending in this application. Claims 30, 33, 34, 38, 48 and 50 are amended; claims 37 is canceled. The amendments are of a formal nature and do not add new matter. All amendments and cancellations are made without prejudice or disclaimer. Applicants reserve the right to pursue canceled or amended subject matter in this or related patent applications.

Applicants understand the amendment filed on April 6, 2007, was not entered. Applicants therefore wish to bring to the Examiner's attention the following currently co-pending patent applications: U.S. application serial no. 11/537,195, U.S. application serial no. U.S. application serial no. 11/608,673, U.S. application serial no. 11/536,951, and U.S. application serial no. 11/536,439.

TELEPHONIC INTERVIEW

Applicants acknowledge with appreciation the courtesies extended by Examiner Holleran to Applicants' representative in the telephonic interviews on May 23 and June 1, 2007. During these interviews, the currently pending rejections were discussed in view of the Advisory Action mailed May 8, 2007. In the telephonic interview, the Examiner agreed to consider a supplementary Amendment after Final.

Based on the June 1 interview, Applicants understand that the Examiner will withdraw the following two double patenting rejections:

- (1) claims 30-38, 40-43, 45-51 and 53-55 had been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 47-63 of copending application no. 09/520,130; and
- (2) claims 30-38, 40-43, 45-51 and 53-55 had been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 45-82 of application no. 10/143,437, now U.S. Patent 7,183,076.

Applicants further agreed to file a supplementary amendment to address the Examiner's rejection of claim 48 as lacking antecedent basis. By the listing of the claims submitted herewith, Applicants withdraw the amendment made to claim 48 in the non-entered amendment mailed on April 6, 2007. Applicants believe this will place this claim in condition for allowance.

WITHDRAWAL OF REJECTIONS/OBJECTIONS

Applicants acknowledge withdrawal of the provisional rejection of claims 30-43, 45-51 and 53-55 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 88-109 of co-pending Application No. 09/863,693 due to the abandonment of 09/863,693.

Applicants also understand, based on the telephonic interview of June 1, 2007, that the Examiner is withdrawing the provisional rejection of claims 30-38, 40-43, 45-51 and 53-55 under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 47-63 of co-pending Application No. 09/520,130. Applicants thank the Examiner for withdrawing this rejection.

Applicants further understand, based on the telephonic interview of June 1, 2007, that the Examiner is withdrawing the provisional rejection of claims 30-38, 40-43, 45-51 and 53-55 under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 45-82 of co-pending Application No. 10/143,437, now U.S. Patent No. 7,183,076. Applicants thank the Examiner for withdrawing this rejection.

Applicants acknowledge withdrawal of the rejection of claim 51 under 35 U.S.C. 112, second paragraph, as being indefinite.

Applicants acknowledge withdrawal of the rejection of claims 30-42 under 35 U.S.C. 112, first paragraph, on the grounds that the Applicants were not in possession of the claimed inventions at the time of filing.

Applicants acknowledge withdrawal of the objection to claim 37 under 37 CFR 1.75(c) as being of improper dependent form for failing further limit the claimed subject matter.

Applicants acknowledge withdrawal of the rejection of claims 30-43, 45-49, 50, 51 and 53-55 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

RESPONSE TO ARGUMENT

Applicants thank the Examiner for considering the response filed on November 20, 2006. The Examiner rejected claims 30, 40, 41, 50 and 51 under 35 U.S.C. 102(b) as allegedly being anticipated by Nissim (Nissim, A. et al., The EMBO Journal, 13(3): 692-698, 1994) as evidenced by Merchant (Merchant, A.M. et al, Nature Biotechnology, 16: 677-681, 1998). The Examiner stated that Nissim teaches methods for expressing scFv fragments in E. coli from a phage library, and that Merchant teaches that the phage library of Nissim has extensive H chain repertoires but a unique L chain sequence. The Examiner concluded that each antibody fragment derived from Nissim's phage library has the same L chain. The Examiner further stated that Nissim also teaches the making of "polyclonal" supernatants via multimerization occurring in the supernatants, especially when the supernatant is concentrated. The Examiner argued that Nissim teaches that the multimerization appears to occur through the binding of an L chain region from one chain binding to an H chain region from another chain. Therefore, the Examiner concluded, Nissim allegedly teaches the claimed methods of producing multispecific antibodies. Further, the Examiner stated, Nissim also teaches the isolated host cells of claim 41, because Nissim teaches how to make the E. coli that produce the scFv fragments.

Applicants respectfully submit that the rejection no longer applies to the claims as amended. The Examiner withdrew the rejection to claim 43 due to the active claim limitation of selecting a nucleic acid. However, the Examiner maintained the rejection to claims 30 and 50 as they do not characterize the structure of the multimerization domain, and the Examiner referenced the structure of diabodies. Without acquiescing to the rejection, or the Examiner's reasoning underlying the rejection, claims 30 and 50 are amended herein to further characterize the polypeptides as comprising a heavy chain constant domain comprising a multimerization domain. Applicants submit that the amended claims are further distinguished from diabodies. Applicants also submit that the claims as amended are not anticipated by Nissim under 35 U.S.C. 102(b).

Based on the Advisory Action, Applicants believe that the Examiner will withdraw the rejection of currently pending claims 30, 40, 41, 50 and 51 under 35 U.S.C. 102(b) as allegedly being anticipated by Nissim.

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Conclusion

Applicant believes that this Amendment has addressed all the pending items in light of the telephonic interview. Applicants believe this Amendment places the application in condition for allowance. Accordingly, favorable reconsideration and allowance of claims 30-36, 38, 40-43, 45, 46, 48-51 and 53-55 at an early date is solicited.

The Commissioner is hereby authorized to charge any fee that may be due in connection with this and the attached papers, or with this application during its entire pendency to or to credit any overpayment to Deposit Account No. 08-1641. Should any issues remain unresolved, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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